

Interview Summary	Application No. 10/773,720	Applicant(s) YAMAMOTO ET AL.	
	Examiner Jefferson Evans	Art Unit 2627	

All participants (applicant, applicant's representative, PTO personnel):

(1) Jefferson Evans (PTO). (3)_____

(2) Jay Knobloch (57,347). (4)_____

Date of Interview: 06 June 2007.

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.
If Yes, brief description: _____

Claim(s) discussed: 1 and 42.

Identification of prior art discussed: _____

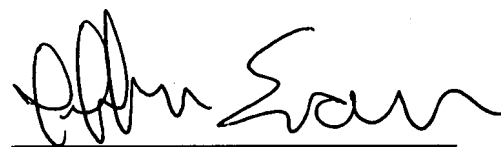
Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


 Examiner's signature, if required

1. (Currently Amended) A magnetic head actuator comprising:
a head-holding substrate having a pair of movable arms for holding a magnetic head; and
piezoelectric elements fixed along the pair of movable arms to move the pair of movable arms in response to an applied voltage,
wherein the head-holding substrate comprises a fired glass-ceramic compact and all surfaces of the substrate are fired,
wherein the fired glass-ceramic compact has a mechanical strength of 200 MPa or more, and
wherein the fired glass-ceramic compact has a glass component comprising PbO, B₂O₃, SiO₂, CaO, and a ceramic component comprising Al₂O₃.

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2. – 8. (Cancelled)

9. (Original) A magnetic head actuator according to Claim 1, wherein the piezoelectric elements are formed on the head-holding substrate by printing and are fired at a lower temperature than the sintering temperature of the fired glass-ceramic compact.

10. (Original) A magnetic head actuator according to Claim 9, wherein the piezoelectric elements comprise PZT.

11 – 29. (Cancelled)

30. (New) A magnetic head actuator comprising:
a head-holding substrate having a pair of movable arms for holding a magnetic head; and
piezoelectric elements fixed along the pair of movable arms to move the pair of movable arms in response to an applied voltage,

wherein the head-holding substrate comprises a fired glass-ceramic compact and all surfaces of the substrate are fired,

wherein the fired glass-ceramic compact has a mechanical strength of 200 MPa or more, and

wherein the fired glass-ceramic compact has a glass component comprising MgO , Al_2O_3 , SiO_2 , B_2O_3 , and a ceramic component comprising SiO_2 .

31. (New) A magnetic head actuator according to Claim 30, wherein the piezoelectric elements are formed on the head-holding substrate by printing and are fired at a lower temperature than the sintering temperature of the fired glass-ceramic compact.

32. (New) A magnetic head actuator according to Claim 31, wherein the piezoelectric elements comprise PZT.

33. (New) A magnetic head actuator comprising:

a head-holding substrate having a pair of movable arms for holding a magnetic head; and

piezoelectric elements fixed along the pair of movable arms to move the pair of movable arms in response to an applied voltage,

wherein the head-holding substrate comprises a fired glass-ceramic compact and all surfaces of the substrate are fired,

wherein the fired glass-ceramic compact has a mechanical strength of 200 MPa or more, and

wherein the fired glass-ceramic compact has a glass component comprising B_2O_3 , SiO_2 , and a ceramic component comprising Al_2O_3 .

34. (New) A magnetic head actuator according to Claim 33, wherein the piezoelectric elements are formed on the head-holding substrate by printing and are fired at a lower temperature than the sintering temperature of the fired glass-ceramic compact.

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35. (New) A magnetic head actuator according to Claim 34, wherein the piezoelectric elements comprise PZT.

36. (New) A magnetic head actuator comprising:
a head-holding substrate having a pair of movable arms for holding a magnetic head; and
piezoelectric elements fixed along the pair of movable arms to move the pair of movable arms in response to an applied voltage,
wherein the head-holding substrate comprises a fired glass-ceramic compact and all surfaces of the substrate are fired,
wherein the fired glass-ceramic compact has a mechanical strength of 200 MPa or more, and
wherein the fired glass-ceramic compact comprises CaO, Al₂O₃, and SiO₂

37. (New) A magnetic head actuator according to Claim 36, wherein the piezoelectric elements are formed on the head-holding substrate by printing and are fired at a lower temperature than the sintering temperature of the fired glass-ceramic compact.

38. (New) A magnetic head actuator according to Claim 37, wherein the piezoelectric elements comprise PZT.

39. (New) A magnetic head actuator comprising:
a head-holding substrate having a pair of movable arms for holding a magnetic head; and
piezoelectric elements fixed along the pair of movable arms to move the pair of movable arms in response to an applied voltage,
wherein the head-holding substrate comprises a fired glass-ceramic compact and all surfaces of the substrate are fired,

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wherein the fired glass-ceramic compact has a mechanical strength of 200 MPa or more, and

wherein the fired glass-ceramic compact has a glass component comprising Li_2O , SiO_2 , MgO , Al_2O_3 , and a ceramic component comprising SiO_2 and Al_2O_3 .

40. (New) A magnetic head actuator according to Claim 39, wherein the piezoelectric elements are formed on the head-holding substrate by printing and are fired at a lower temperature than the sintering temperature of the fired glass-ceramic compact.

41. (New) A magnetic head actuator according to Claim 40, wherein the piezoelectric elements comprise PZT.